

The currents by which most parts of the Atlantic are more or less affected, and of which the Gulf-stream is the most important, generally prevail from the west. Along the coast of Norway the action is decidedly from south to north, and has the effect of keeping the entrance of the most northern ports, such as Hammerfest, free from ice at all seasons. To the south of the Bay of Biscay, more particularly south of Gibraltar, the current sets southward, past the Canary Islands; but I cannot say that I have been able to detect any effect from these currents upon the distribution of Mollusca—a subject to which I have paid some attention.

It is a remarkable fact that the shells of the Açores are of European and West-African species, and not American, as would have been the case had they been carried there by the prevailing currents; and, what is still more remarkable, the *Littorina* most abundant in these islands (*L. striata*) is not a European species, but common to the Madeira, Canary, and Cape Verde Islands, and to the west coast of Africa—a circumstance deserving the attention of geologists, as pointing to a former distribution of land.

Isleworth House, Oct. 16, 1868.

XLIII.—*On Ophiocrinus, a new Genus of Comatulidæ.*

By Dr. C. SEMPER, of Würzburg\*.

AMONG the numerous Comatulidæ found by me at Bohol, there is one species possessing only five, wholly undivided arms. At first I held it to be a young specimen of some real *Comatula*; but, not corresponding exactly to any of the Philippine species, I consider myself justified in describing it as a separate species. In this case the fact of the arms being undivided gives it a claim to a separate genus.

OPHIOCRINUS, n. gen.

Five wholly undivided arms; they spring direct from the central knob, which below bears the cirrhi: other ossicula of the calyx are entirely wanting throughout. Disk — ?

*Ophiocrinus indivisus*, n. sp.

Sixteen cirrhi range in a single row around the small flat knob.

Joints of the cirrhi 18–20, very knotty, especially at the basis; the knots correspond to the articulations: the first two joints are short, as high as they are broad; the third to sixth are

\* Translated by Frau Anna Semper.

the longest, twice as long as they are wide. The last joints slightly compressed, smooth; the last has a strong tooth besides the final hook. The first joint of the arms, arising direct from the knob of the calix, bears a pinnula immediately and has a syzygium; the second is without a pinnula; the third bears one; and the fourth has a pinnula, and also a syzygium. Then the pinnulæ succeed each other, alternating regularly, and always one syzygium between 3-5 joints. The joints of the arms are nearly twice as long as they are high, and, especially in the centre, are strongly wedged sideways. The first two pinnulæ are small, the third and fourth the longest; then follow shorter ones, which, towards the end of the arms, gradually become longer and thinner, whilst the first issue with rather a broad basis. Length of the arms 80 millims., of the cirrhi 9 millims., of the longest pinnulæ 8 millims; the diameter of the central knob is 2 millims.

Unfortunately the disk is missing in the single specimen. The pinnulæ are speckled over with light and dark yellowish brown; the back of the arms is marked by two winding lines.

Pandanon, near Bohol (Philippines), at a depth of 30 fathoms.

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XLIV.—*On the Species of Cæcidæ, Corbulidæ, Volutidæ, Cancellariidæ, and Patellidæ found in Japan.* By ARTHUR ADAMS, F.L.S. &c.

PURSUING my investigations into the molluscan fauna of the Japanese Islands, I have in this communication to identify, enumerate, and systematically arrange the species of some families of which our knowledge in respect to geographical distribution was formerly somewhat limited. With regard to those curious but minute creatures, the *Cæca*, it appears strange that I should have met with no new species. As to such a littoral family as Patellidæ, it is not singular that all the species should have been previously known, as casual observers and sailors are pretty sure to collect them. These shore-inhabiting species are subject to very great variation; and the chief difficulty in dealing with them consists in disposing of the varieties into groups which are natural, so as to reduce the number of the so-called species. All the localities are given solely on my own authority. Numerous other families still remain to be worked out before we can arrive at even an approximate knowledge of the Mollusca of Japan. The specimens forming the material from which this enumeration has